

Claims

1. A fraction comprising essentially purified guinea pig immunoglobulin E having a purity sufficient to obtain a single
5 major band of immunoglobulin E by SDS-PAGE, which is separated from the blood of an allergen-sensitized guinea pig, and having the following properties;
 - (1) having a molecular weight of said major band of about 200 kDa,
 - 10 (2) being usable as an antigen for producing an antibody capable of specifically recognizing guinea pig immunoglobulin E,
 - (3) being positive in a passive cutaneous anaphylaxis reaction in guinea pig,
 - 15 (4) being substantially free of guinea pig immunoglobulin G.
2. The fraction of claim 1, wherein the guinea pig immunoglobulin E has a molecular weight of the major band of
20 187 to 195 kDa.
3. The fraction of claim 1 or 2, wherein the guinea pig immunoglobulin E has a molecular weight of about 186 kDa as determined by mass spectrometry.
- 25 4. The fraction of claims 1 to 3, wherein said major band is separated into two bands by reducing SDS-PAGE, and the molecular weights of the individual bands after the separation are about 70 kDa and about 30 kDa.
- 30 5. The fraction of claims 1 to 4, wherein the allergen is ovalbumin.
6. An antibody capable of specifically recognizing guinea pig immunoglobulin E, produced by immunizing a non-human animal

with the fraction comprising immunoglobulin E of claims 1 to 5.

7. The antibody of claim 6, wherein the antibody is a monoclonal antibody.

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8. The antibody of claim 6 or 7, wherein the antibody exhibits substantially no cross-reaction with guinea pig immunoglobulin G or immunoglobulin M.

10 9. An antibody capable of specifically recognizing guinea pig immunoglobulin E wherein the cross-reaction rate of the antibody with guinea pig immunoglobulin G or immunoglobulin M is less than 0.0001%.

15 10. A reagent for immunoassaying guinea pig immunoglobulin E comprising the antibody of claims 6 to 9.

11. A reagent for immunoassaying guinea pig immunoglobulin E comprising the antibody of claims 6 to 9 and an enzyme-labeled
20 antibody thereof.

12. The reagent of claim 10 or 11, wherein the reagent for immunoassay is a reagent for performing sandwich enzyme-linked immunosorbent assay.

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13. A reagent for immunoassaying guinea pig immunoglobulin E comprising the immobilized antibody of claims 6 to 9 and ovalbumin labeled with a labeling substance.

30 14. A reagent for immunoassaying guinea pig immunoglobulin E comprising immobilized ovalbumin and the antibody of claims 6 to 9 as labeled with a labeling substance.

15. The reagent of claim 13 or 14, wherein the labeling

substance is an enzyme.

16. The reagent of any of claims 13 to 15, wherein the guinea pig immunoglobulin E is ovalbumin-recognizing immunoglobulin E.

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17. The antibody of claims 6 to 9, which is immobilized on a solid phase.

18. The antibody of claim 17, which is used for producing or
10 purifying guinea pig immunoglobulin E.